

<110> Robert G.K. Donald
Paul Liberator
Xiaotian Zhong

<120> Coccidian parasite casein kinase I as a
chemotherapeutic target for antiprotozoal agents

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<151> 2004-01-16

<150> PCT/US2005/000955

<151> 2005-01-12

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Gln	Gly	Gly	Thr	Gly	Ile	Ala	Gln	Val	Phe	Cys	Cys	Glu	Thr	Ala	Gly	
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gac	cat	aac	atc	atg	gcc	atg	gag	ttg	ctc	gga	cct	tct	tta	gag	gac	454
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 <213> Toxoplasma gondii

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<213> Toxoplasma gondii (EST)

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<213> Toxoplasma gondii (EST)

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 Asn Arg Lys Phe Ser Leu Lys Thr Val Arg Met Thr Ala Asp Gln Met
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 Leu Lys Asp Leu Phe Ile Arg Glu Gly Phe Thr Tyr Asp Phe Leu Phe
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Gly	Asn	Gly	Ser	Pro	Val	Asn	Gln	Ser	Pro	Ala	Gln	Gly	Gly	Asn	Gly
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Gly	Ala	Pro	Asn	Ser	Ala	Asn	Asn	Gln	Glu	Ser	Gly	Ala	Pro	Glu	Gln
			340					345					350		
Gln															

<210> 23
 <211> 330
 <212> PRT
 <213> Trypanosoma cruzi

<400> 23

Met	Ser	Leu	Glu	Leu	Arg	Val	Gly	Asn	Arg	Phe	Arg	Leu	Gly	Gln	Lys
1				5					10					15	
Ile	Gly	Ala	Gly	Ser	Phe	Gly	Glu	Ile	Phe	Arg	Gly	Thr	Asn	Ile	Gln
			20					25					30		
Thr	Gly	Glu	Thr	Val	Ala	Ile	Lys	Leu	Glu	Gln	Ala	Lys	Thr	Arg	His
		35					40					45			
Pro	Gln	Leu	Ala	Leu	Glu	Ala	Arg	Phe	Tyr	Arg	Ile	Leu	Asn	Ala	Gly
	50					55					60				
Gly	Gly	Val	Val	Gly	Ile	Pro	Asn	Ile	Leu	Phe	Tyr	Gly	Val	Glu	Gly
65				70						75					80
Glu	Phe	Asn	Val	Met	Val	Met	Asp	Leu	Leu	Gly	Pro	Ser	Leu	Glu	Asp
			85					90						95	
Leu	Phe	Ser	Phe	Cys	Asp	Arg	Lys	Leu	Ser	Leu	Lys	Thr	Thr	Leu	Met
			100				105						110		
Leu	Ala	Glu	Gln	Met	Ile	Ala	Arg	Ile	Glu	Phe	Val	His	Ser	Lys	Ser
		115					120					125			
Val	Ile	His	Arg	Asp	Met	Lys	Pro	Asp	Asn	Phe	Leu	Met	Gly	Thr	Gly
	130				135						140				
Lys	Lys	Gly	His	His	Val	Tyr	Val	Val	Asp	Phe	Gly	Leu	Ala	Lys	Lys
145				150					155						160
Tyr	Arg	Asp	Pro	Arg	Thr	His	Gln	His	Ile	Pro	Tyr	Lys	Glu	Gly	Lys
			165					170						175	
Ser	Leu	Thr	Gly	Thr	Ala	Arg	Tyr	Cys	Ser	Ile	Asn	Thr	His	Leu	Gly
			180					185					190		
Ile	Glu	Gln	Ser	Arg	Arg	Asp	Asp	Leu	Glu	Gly	Ile	Gly	Tyr	Ile	Leu
		195				200						205			
Met	Tyr	Phe	Leu	Arg	Gly	Ser	Leu	Pro	Trp	Gln	Gly	Leu	Lys	Ala	His
	210				215						220				
Thr	Lys	Gln	Glu	Lys	Tyr	Ser	Arg	Ile	Ser	Glu	Arg	Lys	Gln	Thr	Thr
225				230						235					240
Pro	Val	Glu	Thr	Leu	Cys	Lys	Gly	Phe	Pro	Ala	Glu	Phe	Ala	Ala	Tyr
				245				250						255	
Leu	Asn	Tyr	Ile	Arg	Ser	Leu	Arg	Phe	Glu	Asp	Lys	Pro	Asp	Tyr	Ser
			260					265					270		
Tyr	Leu	Lys	Arg	Leu	Phe	Arg	Glu	Leu	Phe	Ile	Arg	Glu	Gly	Tyr	His
		275					280					285			
Val	Asp	Tyr	Val	Phe	Asp	Trp	Thr	Leu	Lys	Arg	Ile	His	Glu	Asn	Leu
	290				295						300				
Lys	Ala	Glu	Gly	Ser	Gly	Gln	Gln	Glu	Gln	Lys	Gln	Gln	Gln	Gln	Gln
305					310					315					320

Gln Arg Glu Arg Gly Asp Val Glu Gln Ala
 325 330

<210> 24
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<220>
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<400> 24
 atggactaca aagacgatga cgacaaggag gtcagggtcg gaggcaagta ccgac 55

<210> 25
 <211> 34
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<220>
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<400> 25
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 <212> DNA
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<400> 26
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<400> 27
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<210> 28
 <211> 68
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<220>

<223> oligonucleotide

<400> 28

ggcggatccg aaaatggact acaaagacga tgacgacaag gaggtcaggg tcggaggcaa 60
gtaccgac 68

<210> 29

<211> 64

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 29

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caac 64

<210> 30

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 30

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<210> 31

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 31

ggcgtcgacg atgttatggg cgcccgcagt ctcgcaaca 39

<210> 32

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 32

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<210> 33

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 33

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41

<210> 34

<211> 57

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

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57

<210> 35

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

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40

<210> 36

<211> 70

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 36

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gtatcgtttg 70

<210> 37

<211> 11

<212> PRT

<213> Eimeria tenella (peptide)

<400> 37

Ser Arg His Pro Gln Leu Ile Tyr Glu Ser Lys
1 5 10

<210> 38

<211> 12

<212> PRT

<213> Eimeria tenella (peptide)

<400> 38

Thr Val Leu Met Leu Ala Asp Gln Met Leu Asn Arg
1 5 10

<210> 39

<211> 11

<212> PRT

<213> Eimeria tenella (peptide)

<400> 39

Asp Ile Lys Pro Asp Asn Phe Leu Ile Gly Arg
1 5 10

<210> 40

<211> 8

<212> PRT

<213> Eimeria tenella (peptide)

<400> 40

Thr Gln Ser His Ile Pro Tyr Arg
1 5

<210> 41

<211> 14

<212> PRT

<213> Eimeria tenella (peptide)

<400> 41

Tyr Ala Ser Val Asn Thr His Leu Gly Ile Glu Gln Ser Arg
1 5 10

<210> 42

<211> 11

<212> PRT

<213> Eimeria tenella (peptide)

<400> 42

Phe Glu Asp Arg Pro Asp Tyr Ser Tyr Leu Arg
1 5 10

<210> 43

<211> 5

<212> PRT

<213> Eimeria tenella (peptide)

<400> 43

Asp Leu Phe Phe Arg
1 5

<210> 44
<211> 30
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<213> Artificial Sequence

<220>
<223> oligonucleotide

<400> 44
aaaatggggc agcaggaaag cactcttggg

30

<210> 45
<211> 29
<212> DNA
<213> Artificial Sequence
<220>
<223> oligonucleotide

<400> 45
gtttccgcag agcttcaaga gcatctggt

29